

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ANDREW LANGLEY

Appeal No. 2001-0109
Application 08/871,898

ON BRIEF

Before FLEMING, RUGGIERO, and LALL, Administrative Patent Judges.
FLEMING, Administrative Patent Judge.

DECISION ON APPEAL

Appellant's invention relates generally to an ink storage reservoir apparatus for a printer, which includes a bag of flexible plastic film (35 and 38). See Appellant's specification Figures 1 through 4, see also page 2, lines 11-21, page 3, lines 14-25 and page 4, line 26 through page 6, line 22. The apparatus includes a plug (23) which serves to close a mouth of the bag (37 or 39). See Appellant's

specification Figure 2, see also page 4, lines 14-19, page 4, line 33 through page 5, line 1 and lines 10-19. The mouth (37 and 39) of the bag (35 and 38) is defined by an encircling lip of flexible plastic film which is uniform in thickness. See Appellant's specification Figure 2, see also page 4, line 33 through page 5, line 1, page 5, lines 10-19, and Appellant's Amendment B, Paper No.6, dated June 28, 1999, page 3, paragraphs 2-3.

The plug (23) has an outward-facing surface with circular dimensions relative to the mouth (37 and 39) of the bag (35 and 38). In order for the mouth (37 and 39) to be fitted over the plug (23), the lip of film that defines the mouth must be stretched. See Appellant's specification Figures 3 and 4, see also page 5, lines 10-30, page 6, lines 9-22, and Appellant's Amendment B, Paper No.6, dated June 28, 1999, page 3, paragraphs 2-3. The lip lies stretched over the outer surface of the plug (26). See Appellant's specification Figures 3 and 4, see also page 5, lines 10-30, page 6, lines 9-22, and Appellant's Amendment B, Paper No.6, dated June 28, 1999, page 3, paragraphs 2-3.

The apparatus includes a plastic ring (32) having an inward-facing surface (34) complementary to the outward-facing surface (26) of the plug (23). See Appellant's specification Figures 1 and 4, see also page 4, lines 21-28 and page 5, lines 22-33. The dimensions of the ring (32), in relation to the dimensions of the plug (23) and of the lip stretched over the outer surface (26) of the plug (23) cause a tight interference fit. See Appellant's specification Figures 1 and 4, see also page 4, lines 21-28, page 6, lines 16-22, page 6, line 34 through page 7, line 15, and Appellant's Amendment B, Paper No.6, dated June 28, 1999, page 3, paragraphs 2-3. The ring (32) acts to seal and grip the lip, tightly and securely between the plug (23) by a uniform interference fit. See Appellant's specification Figures 1 and 4, see also page 4, lines 21-28, page 6, lines 16-22, page 6, line 34 through page 7, line 15, and Appellant's Amendment B, Paper No.6, dated June 28, 1999, page 3, paragraphs 2-3.

Claims 1, 2, 4 through 6, and 8 through 16 are pending before us on appeal, and claim 1 is reproduced below:

1. Ink-storage reservoir apparatus for a printer, wherein: the apparatus includes a bag of flexible plastic film; the apparatus includes a plug, which serves to close a mouth of the bag; the mouth of the bag is defined by an encircling lip of the flexible plastic film; the lip is uniform in thickness,

around the mouth of the bag; the plug has an outward-facing surface;

the apparatus includes a membrane, which can be pierced by, and seal around, a

sharp hollow needle;

the dimensions of the outward-facing surface of the plug, in relation to the dimensions

of the mouth of the bag, are such that, in order for the mouth to be fitted over

the plug, the lip of film that defines the mouth of the bag must be stretched; the said lip lies stretched over the outer surface of the plug; the apparatus includes a ring, and the ring has an inward-facing surface, which is

complementary to the outward-facing surface of the plug; the inward-facing surface of the ring, and the outward-facing surface of the plug, are

substantially circular in form, their circular forms being concentric;

the dimensions of the ring, in relation to the dimensions of the plug and of the lip of

film that defines the mouth of the bag when the lip lies stretched over the outer surface of the plug, are such that the ring is a tight

interference fit over the lip of film when the

lip is stretched over the outer surface of the plug; the ring lies pressed over the lip and over the plug, and encircles

the plug;

whereby the lip of film that defines the mouth of the bag is sealed and gripped, tightly

and securely, between the outward-facing surface of the plug and the inward-facing surface of the ring;

the ring is of a relatively rigid plastic material, and is annular in form, and its form is

characterized as thick and chunky;

the tightness of the interference fit between the plug and the ring, the said lip of film

being trapped therebetween, is such that the bag and the ring are held firmly

and securely to the plug by friction induced by the tight fit;

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the interference fit between the plug and the bag and between the plug and the ring is uniform a to the tightness of the fit, around the mouth of the bag.

References

The references relied upon by the Examiner are:

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| Ecklund | 5,359,356 | Oct. 25, 1994 |
| Kubota et al. (Kubota) | 5,611,461 | Mar. 18, 1997 |

Rejections at Issue

Claims 1-2, 4-6, and 8-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ecklund in view of Kubota.

Opinion

With full consideration being given to the subject matter on appeal, the Examiner's rejections and Appellant's arguments, we will not sustain the rejection of claims 1, 2, 4 through 6, and 8 through 16.

Appellants argue that neither Ecklund nor Kubota teach "the a lip lies stretched over the outer surface of the plug", as recited in independent claim 1. See Appellant's Amended Appeal Brief, Paper No. 18, page 5, paragraph 6 through page 8, paragraph 5, see also Appellant's Reply Brief, Paper No. 21, page 1, paragraphs 1 through 5.

In the final office action, the Examiner stated, "Ecklund does not disclose that the mouth of the bag lies stretched over the outer surface of the plug and secured by a ring . . .". See Final Office Action, Paper No. 5, dated April 28, 1999, page 3, lines 16-18. However, in response to Appellant's arguments upon appeal, the Examiner changed positions in the Examiner's Answer. The Examiner now asserts that Ecklund does teach a lip stretched over the outer surface of the plug. The Examiner relies upon Ecklund's teachings that the plug (44) has a "diameter substantially similar to the inner diameter" of the mouth of the bag (32) (e.g. 1.305 inches). The Examiner concludes that the bag (32) must be stretched in order to lie over the surface of plug (44). See Examiner's Answer, Paper No. 19, dated March 28, 2000, page 6, line 14 through page 7, line 1.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a ***prima facie*** case of obviousness. ***In re Oetiker***, 977 F.2d 1443, 1445, 24 USPQ 1443, 1444 (Fed Cir. 1992). **See also *In re Piasecki***, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in

the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. ***In re Fine***, 87 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. ***Oetiker***, 977 F.2d at 1445, 24 USPQ at 1444. **See also *Piasecki***, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all the evidence and arguments." ***In re Oetiker***, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." ***In re Lee***, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). With these principles in mind, we commence review of the pertinent evidence and arguments of Appellants and Examiner.

As pointed out by our reviewing court, the Patent and Trademark Office must first determine the scope of the claim.

"[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523 (Fed. Cir. 1998). When interpreting a claim, words of the claim are generally given their ordinary and customary meaning, unless it appears from the specification or the file history that they were used differently by the inventor. *See Carroll Touch, Inc. v. Electro Mechanical Sys., Inc.*, 15 F.3d 1573, 1577, 27 USPQ2d 1836, 1840 (Fed. Cir. 1993). Although an inventor is indeed free to define the specific terms used to describe his or her invention, this must be done with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994). Our reviewing court states in *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) that "claims must be interpreted as broadly as their terms reasonably allow."

Claim 1 recites "a lip lies stretched over the outer surface of the plug". Appellant's specification teaches that the lip of the mouth of plastic film is stretched substantially so that no wrinkles remain. Appellant's specification discloses that the stretching is important because the slightest wrinkle in the film will result in leakage over time.

See Appellant's specification, page 6, lines 6-11. Therefore, Appellant's claim 1 does require structure such that the lip of the bag lies stretched over the outer surface of the plug.

Upon review of both references as a whole, we find that neither reference teaches nor suggests a "a lip lies stretched over the outer surface of the plug", as recited in claim 1. Ecklund teaches that the inner diameter of bag (32) and outer diameter of plug (44) are equal to 1.305 inches. See Column 4, lines 30 and 53. This would create a perfect fit between the bag and plug. The perfect fit would not cause stretching because the inner diameter of the lip of the bag and the outer surface diameter of the plug is equal. In contrast, stretching would be the result of having a plug diameter greater than the inner diameter of the lip of the bag.

Kubota teaches simple "crimping" of a bag (1) to a plug (15). See Column 4, lines 1-5, see also figure 4. Crimping causes folds or wrinkles. In contrast, Appellant teaches that the stretching of his invention removes wrinkles. See Appellant's specification, page 6, lines 6-11. Therefore, Kubota does not teach to stretch the lip of bag (1) to cover a plug as claimed by Appellant.

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Claims 2, 4 through 6, and 8 through 16 also require the limitation of "a lip lies stretched over the outer surface of the plug" based on their dependency upon claim 1.

In view of the foregoing, we will not sustain the decision of the Examiner rejecting claim 1 and dependent claims 2, 4 through 6, and 8 through 16 under 35 U.S.C. § 103.

REVERSED

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| MICHAEL R. FLEMING |) | |
| Administrative Patent Judge |) | |
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| |) | BOARD OF PATENT |
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